

M. BRADSHAW

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Background

Shale gas holds out the possibility of contributing to Europe's energy security, while also raising profound questions of ethics, governance and above all public perceptions and acceptability. We set out to understand: 1. how various European publics might construe and respond to the issues of shale gas and its associated risks and extraction operations contextualised against any potential benefits; 2. which issues underlie responses (e.g. concerns about risks, trust or governance); 3. what lessons for regulation can be gleaned from experience with shale so far in North America (US & Canada); 4. what experience can be learned from experience with other controversial energy technologies (e.g. nuclear, CCS, onshore wind etc.); and 5. how public engagement, participation, communication and dissemination of information can be improved to allow the public to reach better informed decisions.

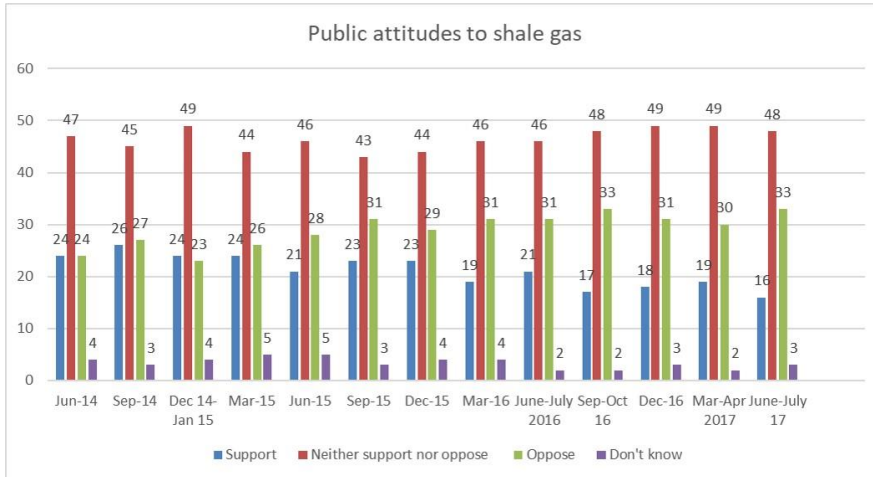
Study

Our research was divided into three phases. The first phase involved the review of peer reviewed research on public perceptions and understandings of shale gas in North America and a review of current research in a European context. A third review considered lessons that might be learnt from public understanding and perceptions of other large-scale energy infrastructures: nuclear power, carbon capture and storage and onshore wind. The second phase involved a critical engagement with the concept of the 'Social Licence to Operate.' We chose this concept as it is evoked by: national governments, industry and communities. The third, focused on best practice in public engagement. A study was produced of public engagement activities in relation to shale gas development in North America. A parallel report looked at best practice methods for understanding public perceptions. We also updated the initial review of research in Europe.

Results

First, in relation to public perceptions and understandings. 1. There is a significant share of the public that are either for or against shale gas development, but the largest number remain undecided. 2. Research in Europe shows that people living in closer proximity to potential shale gas development express more reservations about it, although continued reliance on fossil fuels and the impact on climate change are also concerns amongst the wider population. 3. The public are not convinced that there is a case for shale gas development and would rather see investment in low carbon alternatives, especially after the Paris Agreement. In relation to public engagement: 1. It is important to understand the local context, the key community issues, and the local political landscape. 2. Early and ongoing public engagement, that is two-way and acted upon is essential. 3. At present, there is general lack of trust of national government, less so regional and local government, the industry and the regulators. The latter are often perceived to be 'too close' to industry and in favour of development.

Science-based Recommendations



UK Government Survey of Public Attitudes.

Public Perceptions and Understanding

- There is a clear need for independent and rigorous information to support a better-informed debate; however, it should not be assumed that more information would lead to a more positive perception of shale gas development.
- There is a need to broaden the debate to consider wider issues of energy and climate change to place the shale gas question within the wider frame of energy futures.

Public Engagement

- The government, industry and regulators need to understand the importance of early, appropriate and on-going engagement and need to invest sufficient resources.
- Honesty and transparency are essential in gaining public trust.
- Although the social license has no legal status, it can be an effective tool to enable engagement and empower local communities, who may decide to withhold a social license to operate.



Psychological identification - The community has very high trust in the industry and sees itself as sharing responsibility for the company's success. Stakeholders will *advocate* for the company when necessary.

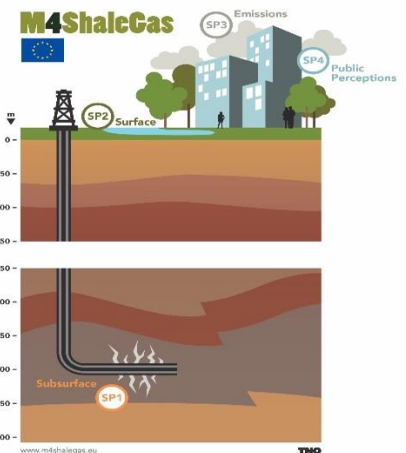
Approval - The industry has established both legitimacy and credibility, and the community *approves* of the industry.

Acceptance - The community listens to the industry and considers its proposals. If, by their own standards, they have no reason to doubt the industry's credibility, they may allow a project to tentatively proceed.

Withholding/withdrawal - The rejection level of a social licence is the worst case scenario. This can manifest in complaints, blockades and public action against individual sites, companies or the industry as a whole.

The Project

M4ShaleGas examines the potential environmental impacts and risks related to **shale gas** exploration and exploitation in Europe with the goal to build a technical and social knowledge base on best practices and innovative approaches for **measuring, monitoring, mitigating, and managing** these impacts.



4 sub-programs:

- SP1-subsurface
- SP2-surface
- SP3-air emissions
- SP4-public perceptions

Funding:

The project that has received funding by the European Union's Horizon 2020 research and innovation programme under grant agreement number 640715.

Horizon 2020 Topic LCE-16-2014:

Understanding, preventing and mitigating the potential environmental impacts and risks of shale gas exploration and exploitation.

Project duration:

1 June 2015 – 30 November 2017

Coordination:



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Model of a Social Licence to Operate.

Source : <https://www.slideshare.net/GRIFPA/griusconfa-strategic-approach-to-stakeholder-engagement-dr-leeora-black>.